

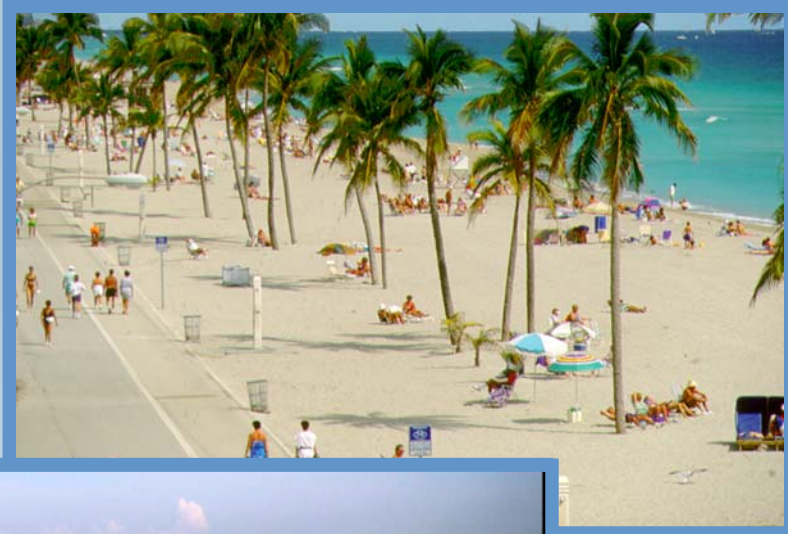
Broward Water Resources Task Force

Local Water Resources Overview

September 19, 2008
Jennifer Jurado, Ph.D.

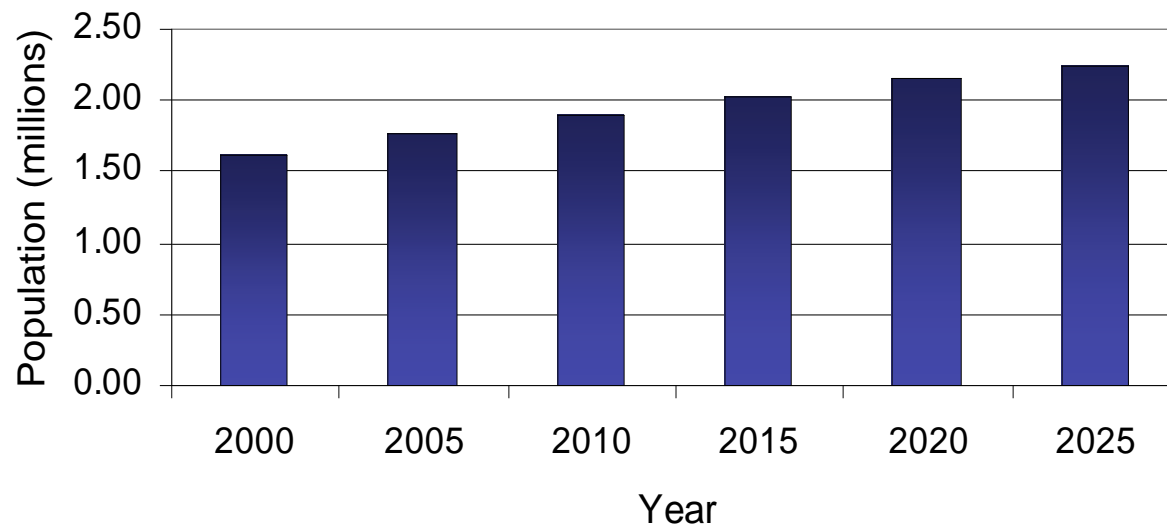


Broward – A Growing Community



Long-term Growth Trends

Broward Population Projections

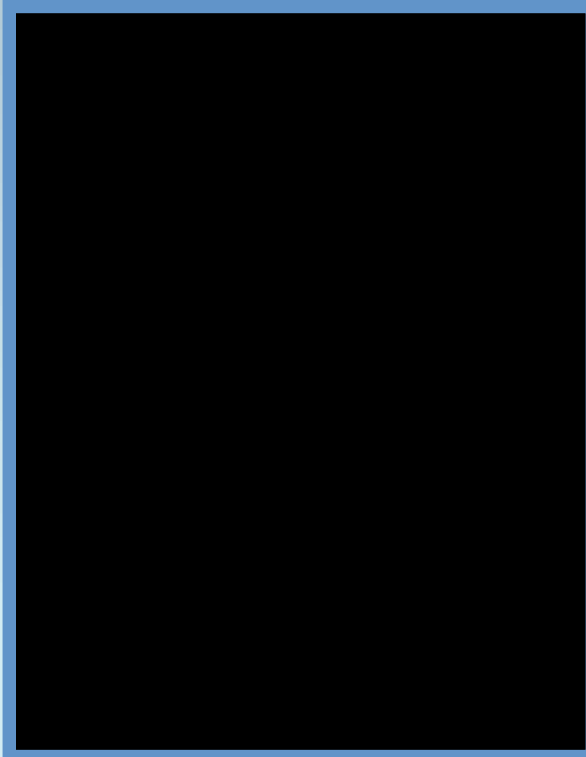


Facts:

- 16th most populous county in U.S.
- 10th in terms of numerical growth
- Projected 39% increase by 2025

A Closer Look at Water

- 2002 – Strengthening of Growth Management Act to require greater consideration of future water supply as part of land-use planning.



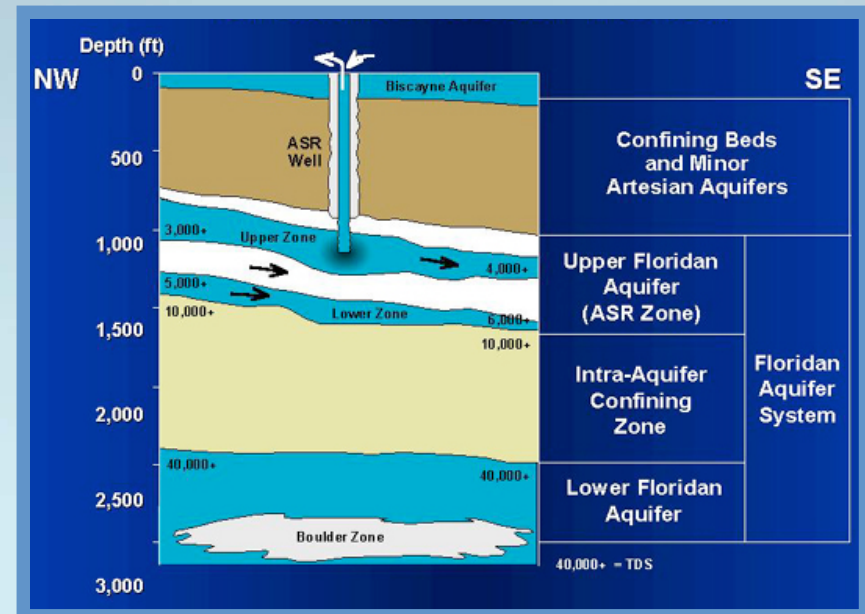
Water Conservation

- 2004 – Legislation requires development of a state-wide water conservation program with focus on goal-based water conservation measures



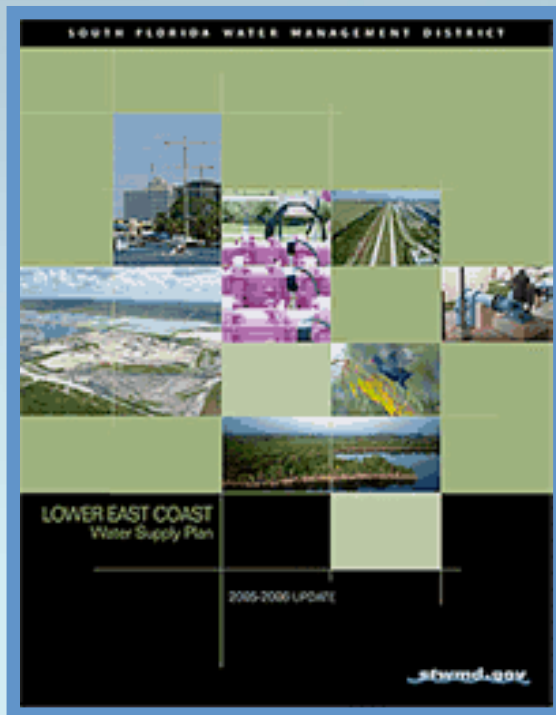
More Water Policy

- 2005 – Passage of SB 360/444 provides state cost-share funding in the development of alternative water supplies and encourages multijurisdictional projects.



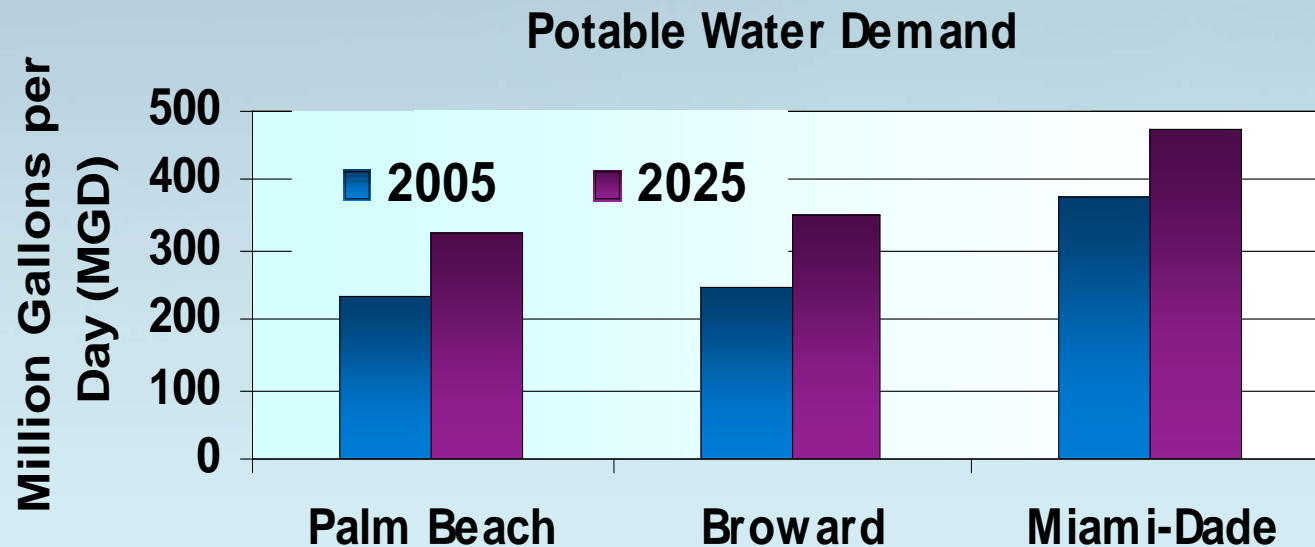
Recent Developments

- 2007 — Regional Water Availability Rule caps future withdrawals from the Biscayne Aquifer.

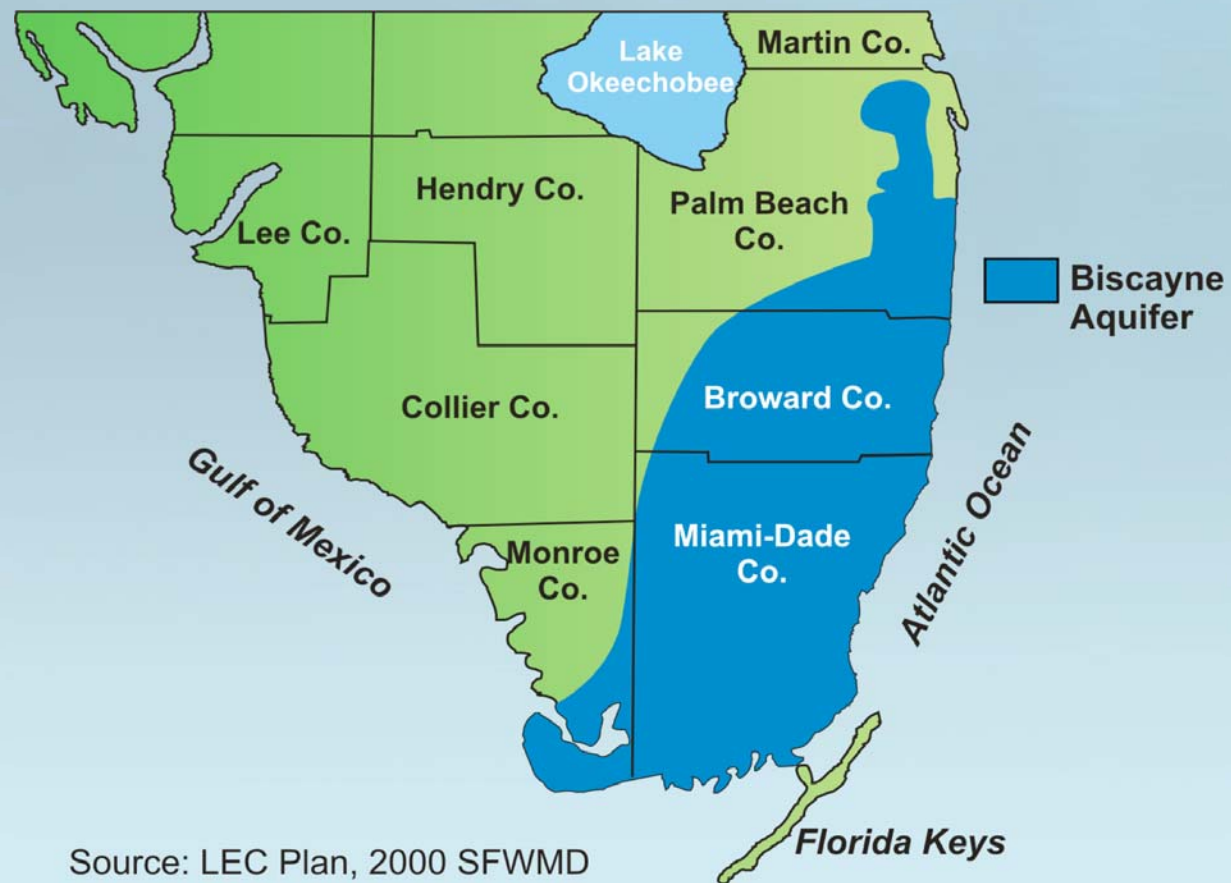


Implications for Broward?

- Broward's countywide water demand is projected to increase 40% by 2025.
- About 300 MGD in tri-county area and 106 MGD in Broward County.

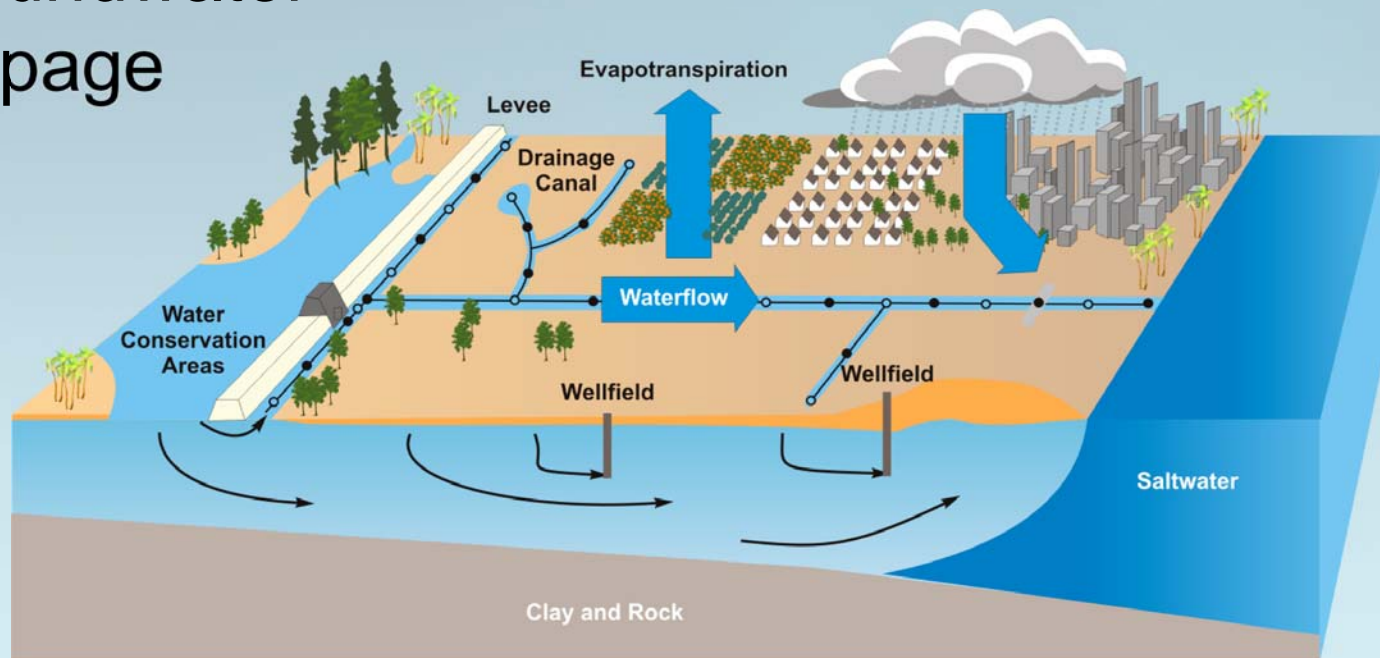


Traditional Water Supply

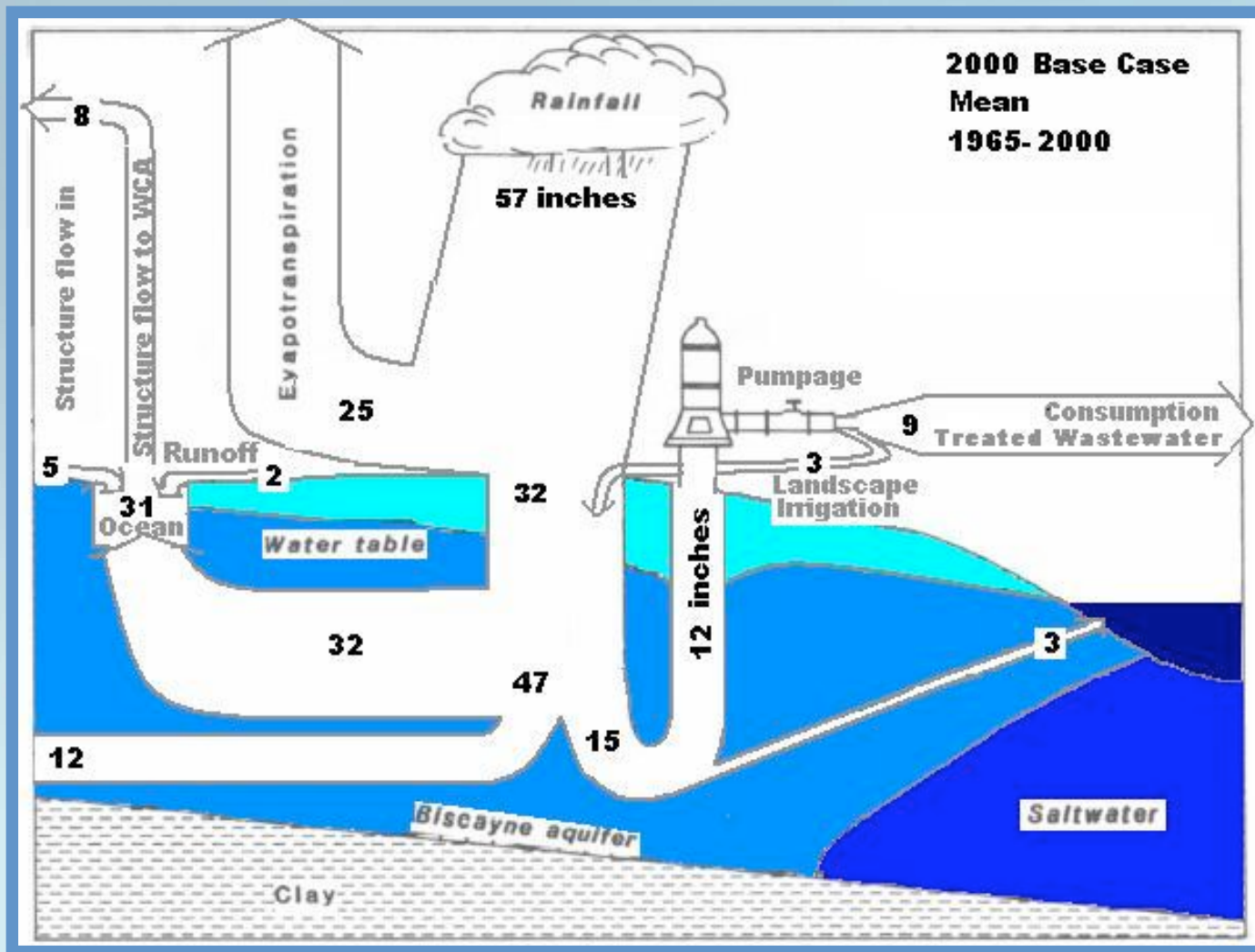


Aquifer Recharge

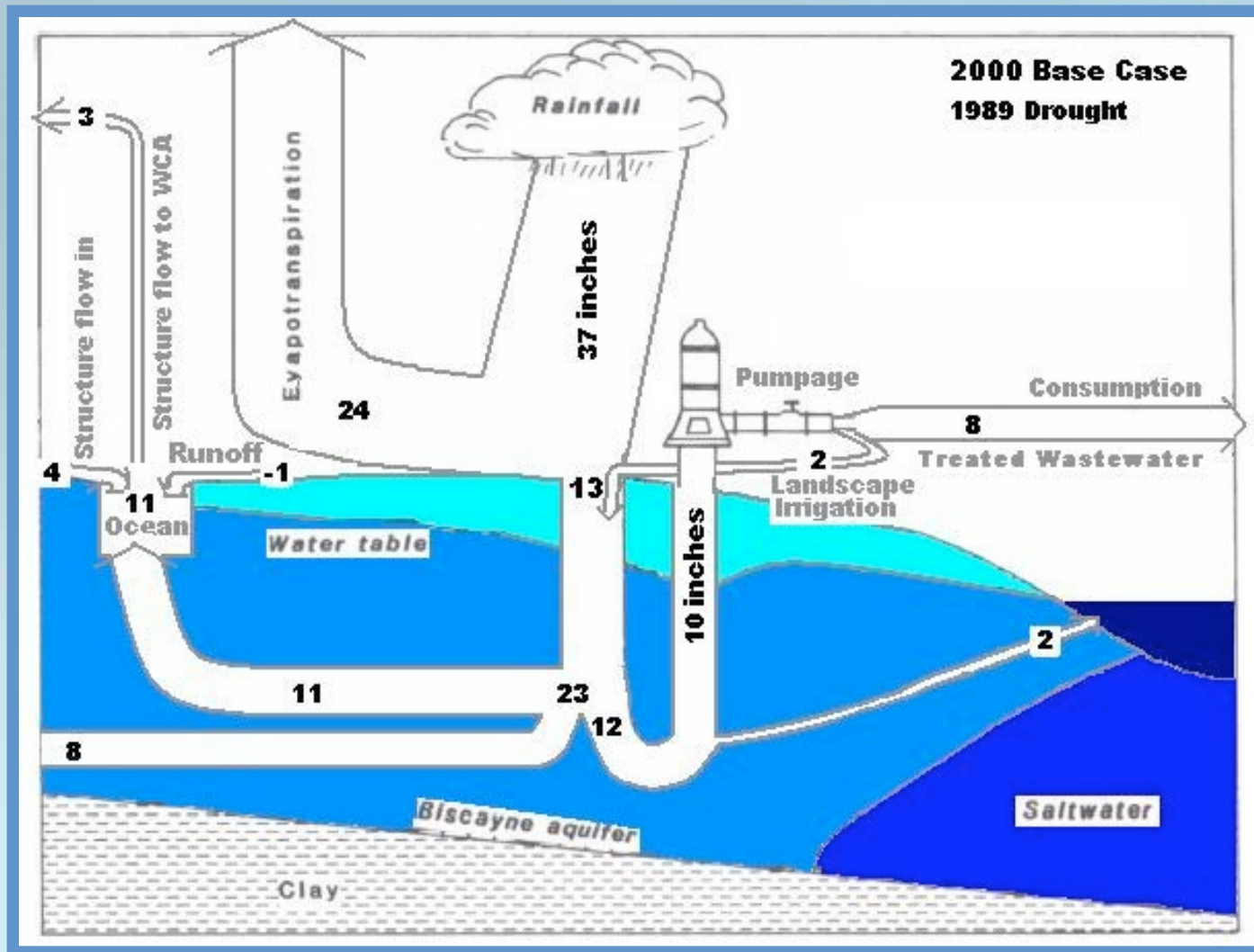
- Rainfall
- Surface deliveries
- Groundwater seepage



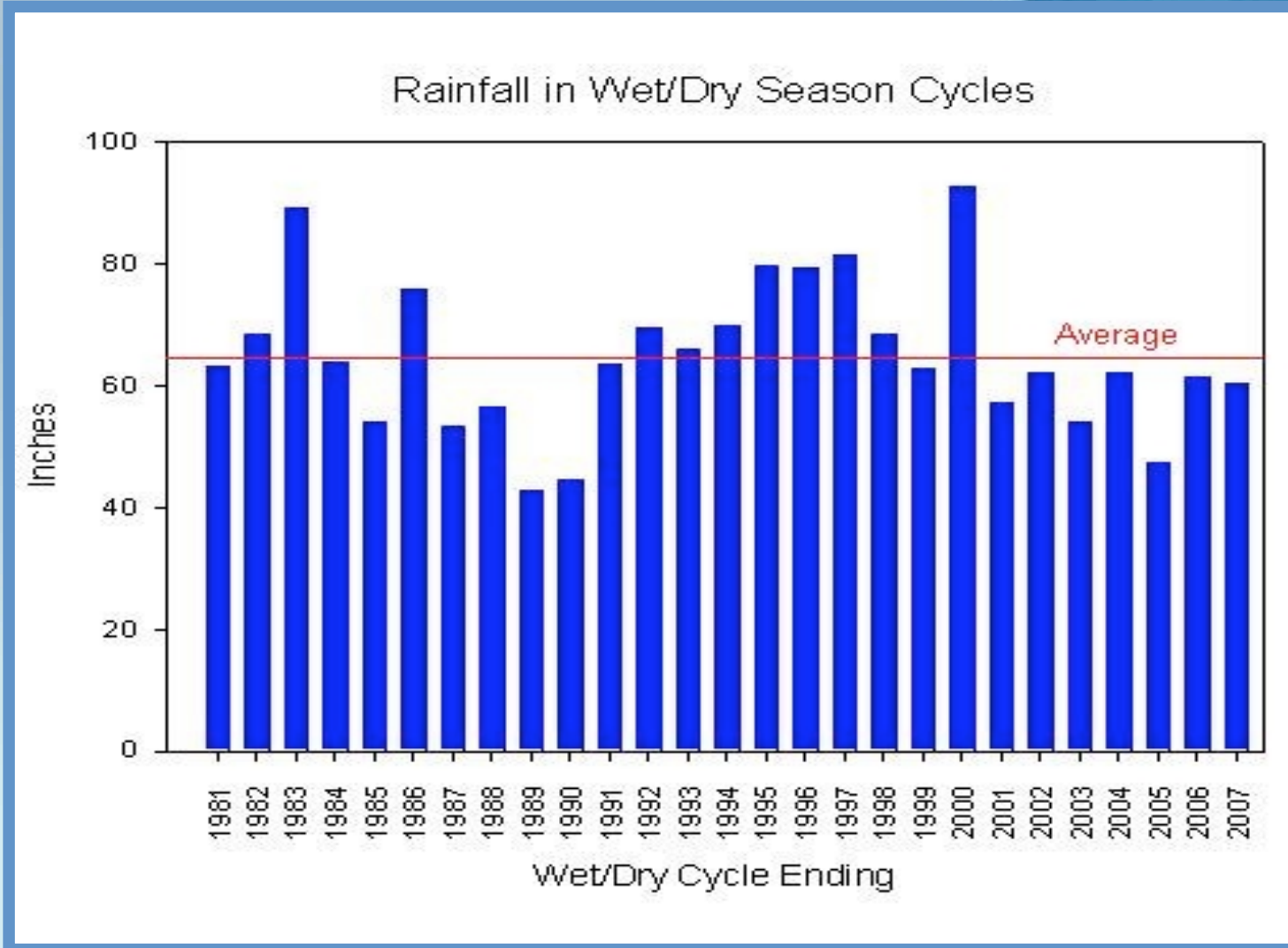
Typical Water Budget



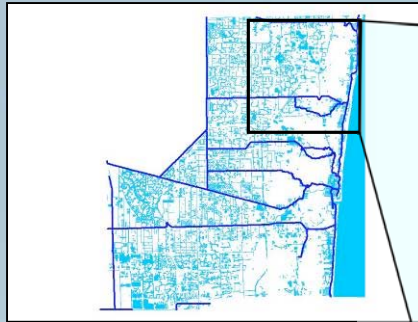
Drought Water Budget



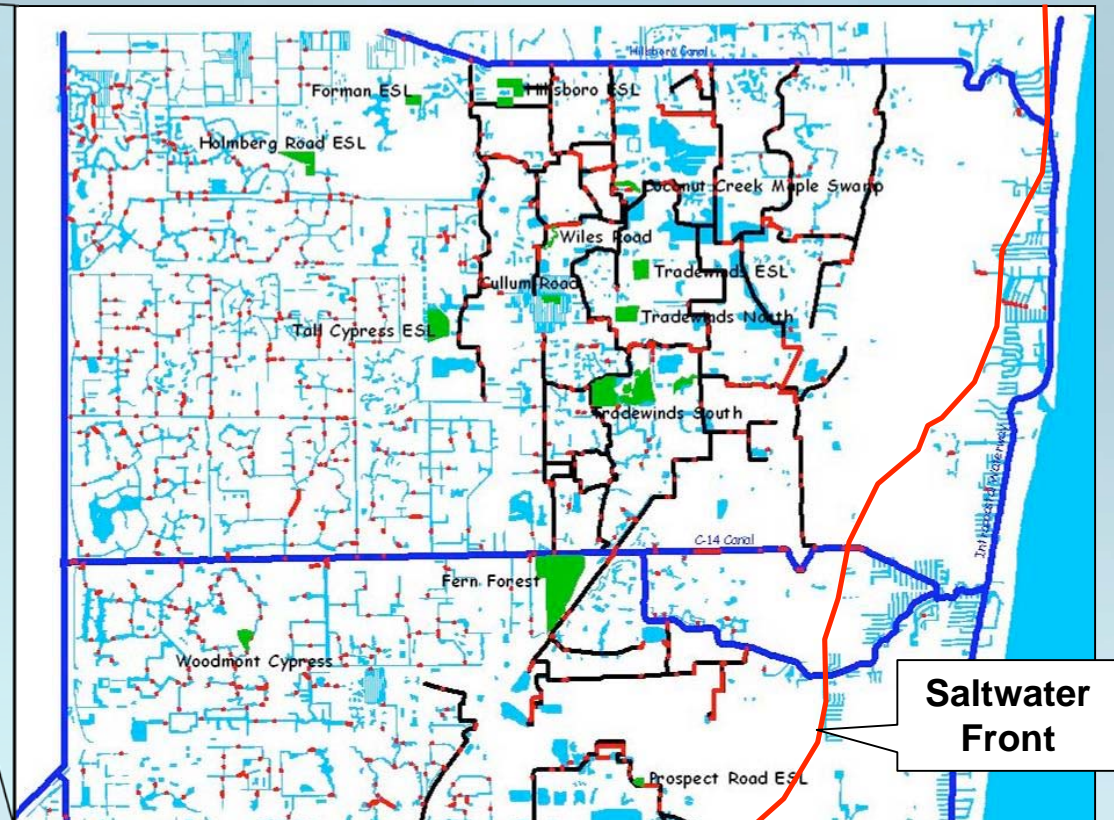
Rainfall Variability



Surface Water Management

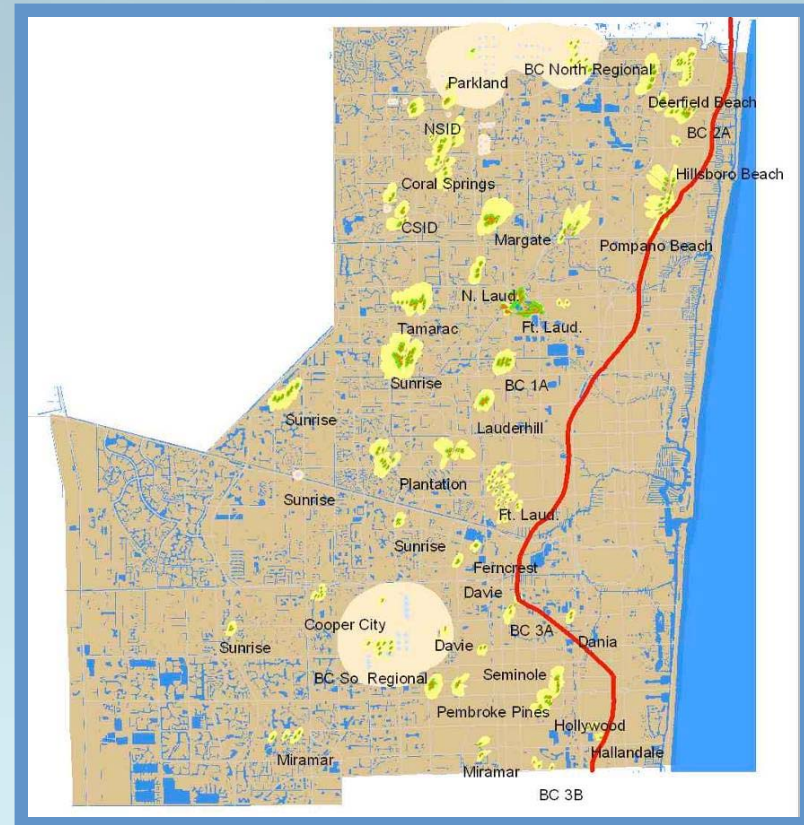


- Natural systems
- Wellfields
- Saltwater intrusion
- Flood protection

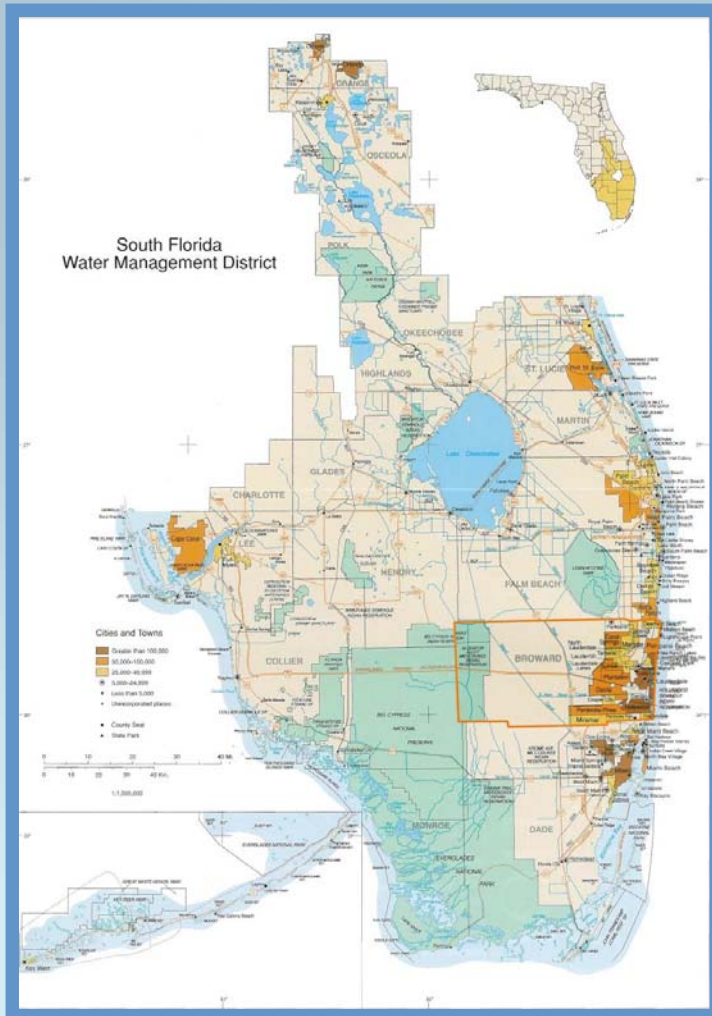


Saltwater Intrusion

- Development and application of technical tools:
 - Broward County hydrologic model
 - Saltwater intrusion model



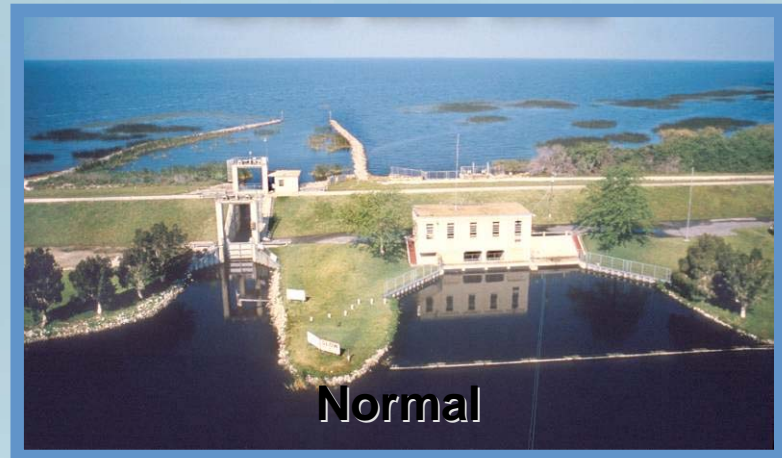
Additional Pressures



- Regional water shortages
- Lake Okeechobee water levels

Lake Okeechobee

- Water levels managed in accordance with a regulatory schedule.
 - Environmental needs
 - Water supply considerations
 - Rainfall predictions
- Concerns about dike dropped levels by 1 ft.
- Regional water shortage.
- This impacts water supply.



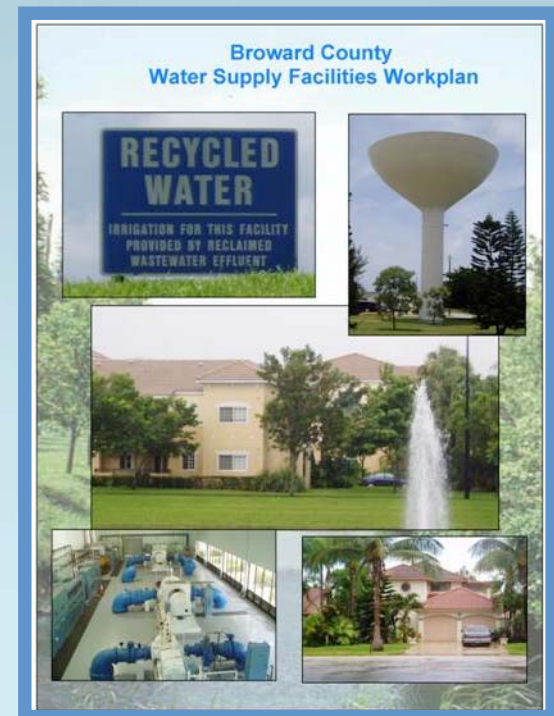
Regional Response

- Increased focus on water conservation
 - Mandatory water restrictions
 - Development of year-round water conservation rules
 - Creation of a District-wide water conservation strategy
 - Working Water Solutions and other events
 - Joint Meeting of Commissioners and GB Members
 - Broward Water Resources Task Force



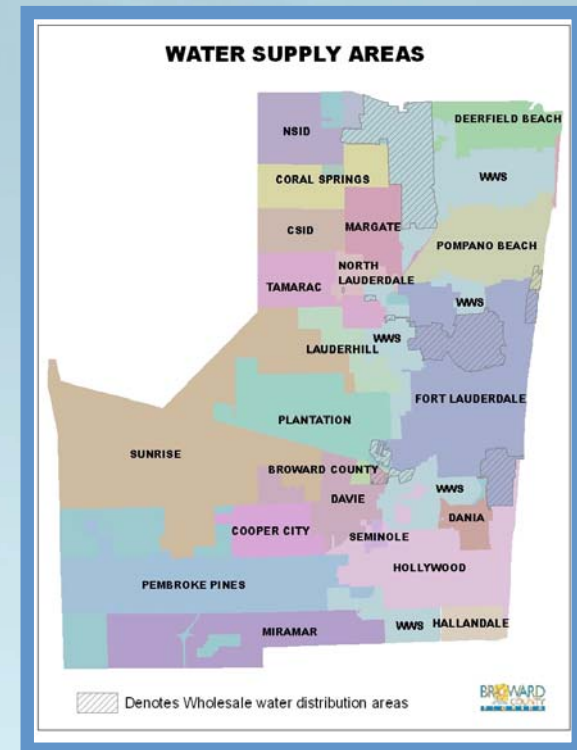
Planning Requirements

- Complete 10-year Water Supply Facility Workplans and Comp Plans updates by August 2008
 - Assess demands and quantify needs
 - Commit to specific alternative water supplies
 - Identify and budget necessary funds



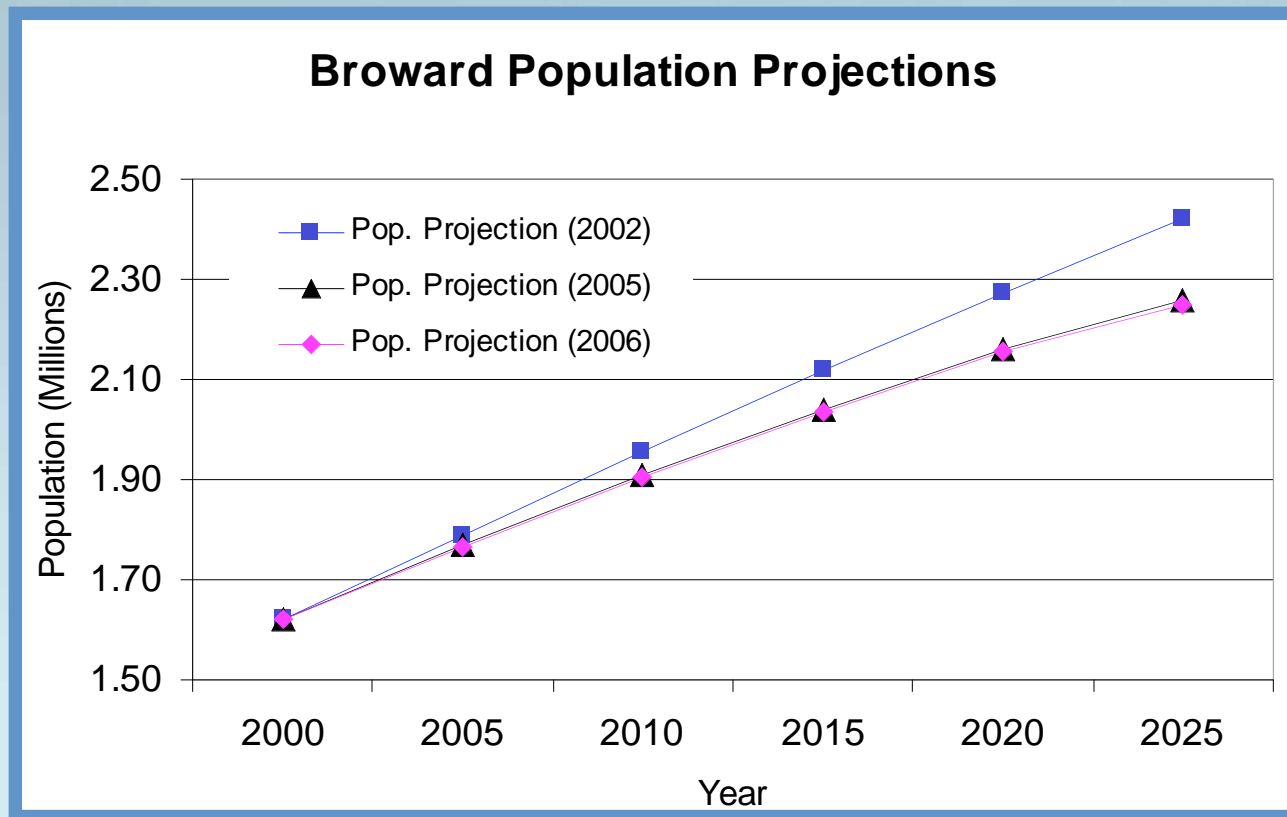
Coordinate Activities

- The Broward Water Community
 - 28 Water utilities
 - 25 Water providers
 - 24 Drainage/water control districts
 - 31 Municipalities
 - 200 + elected officials



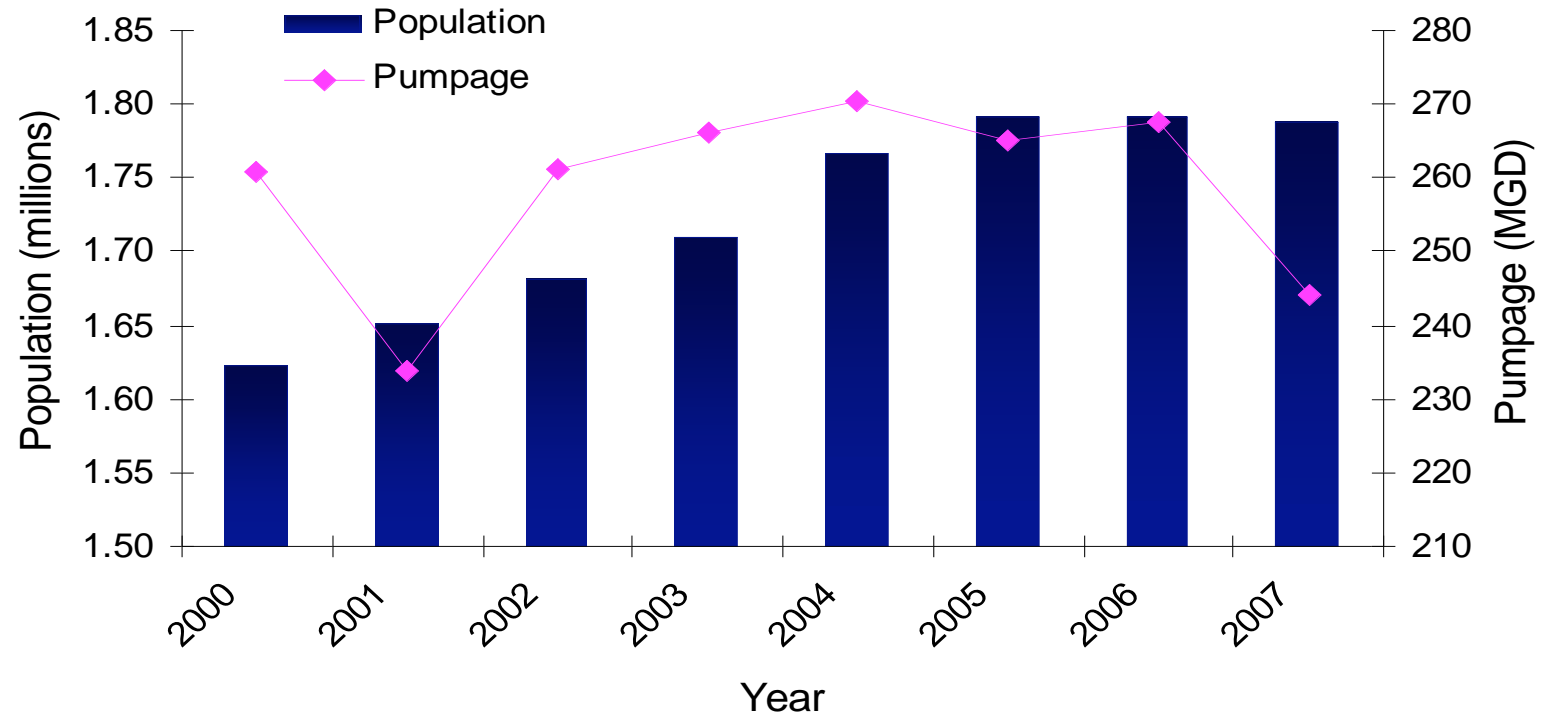
Review Assumptions

- Growth rates
- Timeframes
- Demands



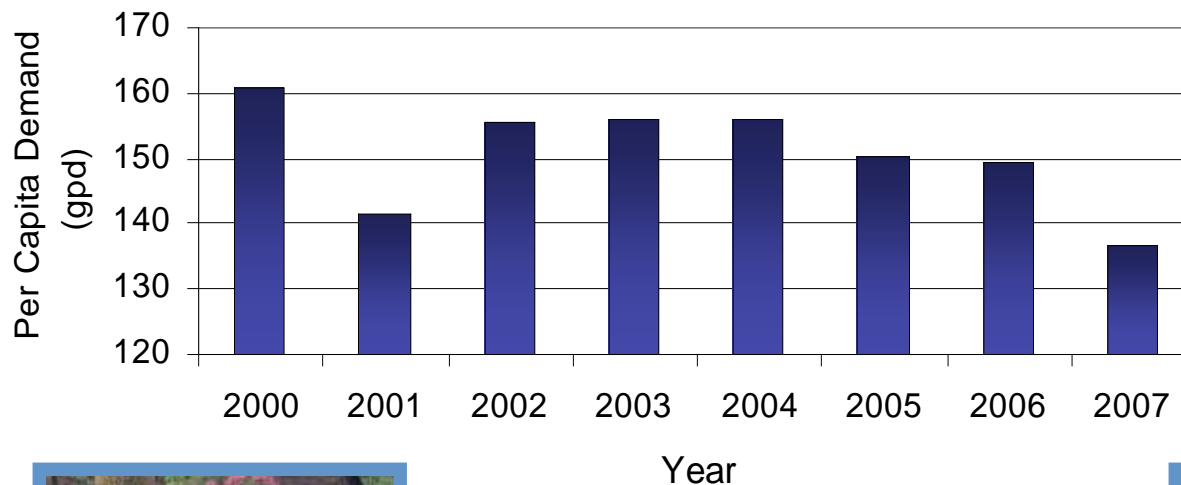
Decouple Growth and Demand

Water Demands vs. Population Growth



Promote Conservation

**Broward County
Per Capita Demand**



- 15% reduction since 2000
- 9% reduction in last year



Next Steps

- Assess situation and review information
- Consider and evaluate options
- Report recommendations
- Establish commitments



Questions?

